

Amendments to the Claims:

Claims 1-64 are pending in this application. Claims 1, 19, 36 and 47 are independent. Claims 1-5, 7-9, 18-22, 24-26, 35-39, 41, 46-50, 52-54, 63 and 64 are rejected. Claims 6, 10-17, 23, 27-34, 40, 42-45, 51 and 55-62 are objected to. Claims 1, 10, 19, 27, 36, 42, 47 and 55 are herein amended. No new matter has been added.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (CURRENTLY AMENDED): An image distribution system comprising:

an image sensing apparatus controllable by an external device;

an image transmission apparatus having a function of digitizing and transmitting an image signal acquired by said image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus;

an image reception apparatus which receives and displays the transmitted digitized image signal, further requests to control said image sensing apparatus; and

a network connecting said image transmission apparatus and said image reception apparatus,

wherein, in a case where said image transmission apparatus issues the authorization to said image reception apparatus to control said image sensing apparatus ~~to said image reception apparatus~~ and communication between said image reception apparatus and said image transmission apparatus is undesirably terminated while said image reception apparatus holds the authorization, ~~by~~ after restoring the communication within a predetermined period, conditions of said image sensing apparatus are restored to conditions at the time of the undesired

termination, and said image reception apparatus is allowed to continuously control said image sensing apparatus under the ~~same~~ restored conditions ~~as at the time of the undesired termination.~~

2 (ORIGINAL): The image distribution system according to claim 1, wherein at least one of panning operation, tilting operation, and zooming operation of said image sensing apparatus is controlled by said image reception apparatus.

3 (ORIGINAL): The image distribution system according to claim 1, wherein said image transmission apparatus comprises certification means for identifying whether or not said image reception apparatus is allowed to control said image sensing apparatus.

A3
cont

4 (ORIGINAL): The image distribution system according to claim 1, wherein said image transmission apparatus immediately issues the authorization to control said image sensing apparatus to said image reception apparatus when said image reception apparatus restores the communication within the predetermined period after the undesired termination of the communication.

5 (ORIGINAL): The image distribution system according to claim 1, wherein, in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination and another image reception apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, said

image transmission apparatus gives priority to said restored image reception apparatus to receive the authorization to control said image sensing apparatus after the other image reception apparatus releases the authorization to control said image sensing apparatus.

6 (ORIGINAL): The image distribution system according to claim 1, wherein, in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination and another image reception apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, said image transmission apparatus suspends the authorization issued to the other image reception apparatus and issues authorization to control said image sensing apparatus to said restored image reception apparatus.

A3
cont

7 (ORIGINAL): The image distribution system according to claim 1, said image transmission apparatus comprises administration means for, when a request for authorization to control said image sensing apparatus is received after the undesired termination, determining whether or not an image reception apparatus which requested the authorization is said image reception apparatus whose communication was undesirably terminated while holding an authorization.

8 (ORIGINAL): The image distribution system according to claim 7, wherein said administration means performs the determination on the basis of an IP (internet protocol) address and a user name of the image reception apparatus which requested the authorization.

9 (ORIGINAL): The image distribution system according to claim 7, wherein said administration means performs the determination on the basis of a key issued by said image transmission apparatus and a password.

A3
conf

10 (CURRENTLY AMENDED): The image distribution system according to claim 5 1, wherein, ~~in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination,~~ said image transmission apparatus issues the authorization to control said image sensing apparatus after restoring the conditions of said image sensing apparatus to the conditions at the time of the undesired termination.

11 (ORIGINAL): The image distribution system according to claim 6, wherein, in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination, said image transmission apparatus issues the authorization to control said image sensing apparatus after restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination.

12 (ORIGINAL): The image distribution system according to claim 6, wherein said image transmission apparatus issues the authorization to control said image sensing apparatus to said restored image sensing apparatus after suspending the authorization issued to the other image sensing apparatus if said restored image reception apparatus has higher priority than the other image reception apparatus.

13 (ORIGINAL): The image distribution system according to claim 12, wherein said priority is determined on the basis of time when the image reception apparatuses start controlling said image sensing apparatus.

A3
mt

14 (ORIGINAL): The image distribution system according to claim 12, wherein, when the image distribution system charges an image reception apparatus for the authorization to control said image sensing apparatus, said priority is determined on the basis of ranks given to the image reception apparatuses in a charging system.

15 (ORIGINAL): The image distribution system according to claim 1, wherein said image transmission apparatus comprises authorization period administration means for setting a period allowed for said image reception apparatus to hold the authorization at the time of restoration of communication after the undesired termination.

16 (ORIGINAL): The image distribution system according to claim 15, wherein said authorization period administration means sets a period T-t for said image reception apparatus at the time of restoration of communication, where T indicates a period which is allowed for an image reception apparatus to hold authorization and t indicates a period elapsed by the time of the termination.

17 (ORIGINAL): The image distribution system according to claim 15, wherein said authorization period administration means sets a period T-t-s for said image reception apparatus at the time of restoration of communication, where T indicates a period which is allowed for an image reception apparatus to hold authorization, t indicates a period elapsed by the time of the termination, and s indicates a period elapsed since the termination of the communication until the restoration of the communication.

18 (ORIGINAL): The image distribution system according to claim 5, wherein said image transmission apparatus informs said restored image reception apparatus of time to take until said image transmission apparatus issues the authorization to control said image sensing apparatus to said restored image reception apparatus, and said image reception apparatus has a function of indicating the notified time.

19 (CURRENTLY AMENDED): A control method for controlling an image distribution system having an image sensing apparatus controllable by an external device, an image

transmission apparatus having a function of digitizing and transmitting an image signal acquired by said image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus, an image reception apparatus which receives and displays the transmitted digitized image signal, further requests to control said image sensing apparatus, and a network connecting said image transmission apparatus and said image reception apparatus,

wherein, in a case where the authorization to control said image sensing apparatus is issued to said image reception apparatus and communication between said image reception apparatus and said image transmission apparatus is undesirably terminated while said image reception apparatus holds the authorization, after said image reception apparatus restores communication within a predetermined period,

restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination; and

allowing said image reception apparatus ~~is allowed~~ to continuously control said image sensing apparatus under the same restored conditions ~~as at the time of the undesired termination if said image reception apparatus restores communication within a predetermined period.~~

20 (ORIGINAL): The control method according to claim 19, comprising a certification step of identifying whether or not said image reception apparatus is allowed to control said image sensing apparatus.

21 (ORIGINAL): The control method according to claim 19, comprising a step of immediately issuing the authorization to control said image sensing apparatus to said image reception apparatus when said image reception apparatus restores the communication within the predetermined period after the undesired termination of the communication.

22 (ORIGINAL): The control method according to claim 19, comprising, in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination and another image reception apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, a step of giving priority to said restored image reception apparatus to receive the authorization to control said image sensing apparatus after the other image reception apparatus releases the authorization to control said image sensing apparatus.

23 (ORIGINAL): The control method according to claim 19, comprising:
a step of suspending the authorization issued to another image reception apparatus in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination and the other image reception apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication; and

a step of issuing authorization to control said image sensing apparatus to said restored image reception apparatus after suspending the authorization issued to the other image reception apparatus.

24 (ORIGINAL): The control method according to claim 19 comprising:

a reception step of receiving a request for authorization to control said image sensing apparatus after the undesired termination; and

A3
a determination step of determining whether or not an image reception apparatus which requested the authorization is said image reception apparatus whose communication was undesirably terminated while holding an authorization.

25 (ORIGINAL): The control method according to claim 24, wherein, in said determination step, the determination is performed on the basis of an IP (internet protocol) address and a user name of the image reception apparatus which requested the authorization.

26 (ORIGINAL): The control method according to claim 24, wherein, in said determination step, the determination is performed on the basis of a key issued at said image transmission apparatus and a password.

27 (CURRENTLY AMENDED): The control method according to claim ~~22~~ 19, comprising:

~~a condition restoration step of restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination; and~~

~~a step of issuing the authorization to control said image sensing apparatus after said condition restoration step~~ restoring the conditions.

28(ORIGINAL): The control method according to claim 23, comprising:

A3
cont
a condition restoration step of restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination; and

a step of issuing the authorization to control said image sensing apparatus after said condition restoration step.

29 (ORIGINAL): The control method according to claim 23, comprising a step of determining whether or not said restored image reception apparatus has higher priority than the other image reception apparatus,

wherein in said suspending step, the authorization issued to the other image reception apparatus is suspended when said restored image reception apparatus has higher priority than the other image reception apparatus.

30 (ORIGINAL): The control method according to claim 29, wherein said priority is determined on the basis of time when the image reception apparatuses start controlling said image sensing apparatus.

31 (ORIGINAL): The control method according to claim 29, wherein, when an image reception apparatus is charged for the authorization to control said image sensing apparatus, said priority is determined on the basis of ranks given to the image reception apparatuses in a charging system.

A3
cont
32 (ORIGINAL): The control method according to claim 19 comprising an authorization period administration step of setting a period allowed for said image reception apparatus to hold the authorization at the time of restoration of communication after the undesired termination.

33 (ORIGINAL): The control method according to claim 32, wherein, in said authorization period administration step, a period T-t is set for said image reception apparatus at the time of restoration of communication, where T indicates a period which is allowed for an image reception apparatus to hold authorization and t indicates a period elapsed by the time of the termination.

34 (ORIGINAL): The control method according to claim 32, wherein, in said authorization period administration step, a period T-t-s is set for said image reception apparatus at the time of

restoration of communication, where T indicates a period which is allowed for an image reception apparatus to hold authorization, t indicates a period elapsed by the time of the termination, and s indicates a period elapsed since the termination of the communication until the restoration of the communication.

35 (ORIGINAL): The control method according to claim 22 comprising:

A3 cont
a step of informing said restored image reception apparatus of time to take until said image transmission apparatus issues the authorization to control said image sensing apparatus to said restored image reception apparatus; and

a step of indicating the notified time in said restored image reception apparatus.

36 (CURRENTLY AMENDED): A computer program product comprising a computer usable medium having computer readable program code means embodied in said medium of a control method for controlling an image distribution system having an image sensing apparatus controllable by an external device, an image transmission apparatus having a function of digitizing and transmitting an image signal acquired by said image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus, an image reception apparatus which receives and displays the transmitted digitized image signal, further requests to control said image sensing apparatus, and a network connecting said image transmission apparatus and said image reception apparatus,

said product including:

computer readable program code means for, in a case where the authorization to control said image sensing apparatus is issued to said image reception apparatus and communication between said image reception apparatus and said image transmission apparatus is undesirably terminated while said image reception apparatus holds the authorization, after restoring the communication within a predetermined period, restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination; and

computer readable program code means for enabling said image reception apparatus to continuously control said image sensing apparatus under the same restored conditions ~~as at the time of the undesired termination if said image reception apparatus restores communication within a predetermined period.~~

37 (ORIGINAL): The computer program product according to claim 36, further comprising computer readable program code means of a certification step for identifying whether or not said image reception apparatus is allowed to control said image sensing apparatus.

38 (ORIGINAL): The computer program product according to claim 36, comprising computer readable program code means for immediately issuing the authorization to control said image sensing apparatus to said image reception apparatus when said image reception apparatus restores the communication within the predetermined period after the undesired termination of the communication.

39 (ORIGINAL): The computer program product according to claim 36, comprising
computer readable program code means for, in a case where said image reception apparatus
restores the communication within the predetermined period after the undesired termination and
another image reception apparatus holds authorization to control said image sensing apparatus at
the time of the restoration of the communication, giving priority to said restored image reception
apparatus to receive the authorization to control said image sensing apparatus after the other
image reception apparatus releases the authorization to control said image sensing apparatus.

40 (ORIGINAL): The computer program product according to claim 36, comprising:

A3 cont
computer readable program code means for suspending the authorization issued to
another image reception apparatus in a case where said image reception apparatus restores the
communication within the predetermined period after the undesired termination and the other
image reception apparatus holds authorization to control said image sensing apparatus at the time
of the restoration of the communication; and

computer readable program code means for issuing authorization to control said
image sensing apparatus to said restored image reception apparatus after suspending the
authorization issued to the other image reception apparatus.

41 (ORIGINAL): The computer program product according to claim 36 comprising:

computer readable program code means for receiving a request for authorization
to control said image sensing apparatus after the undesired termination; and

computer readable program code means for determining whether or not an image reception apparatus which requested the authorization is said image reception apparatus whose communication was undesirably terminated while holding an authorization.

42 (CURRENTLY AMENDED): The computer program product according to claim 39 36, comprising:

~~computer readable program code means for restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination; and~~

A3 cont
computer readable program code means for issuing the authorization to control said image sensing apparatus after restoring the conditions.

43 (ORIGINAL): The computer program product according to claim 40, comprising:

computer readable program code means for restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination in a case where said image reception apparatus restores the communication within the predetermined period after the undesired termination; and

computer readable program code means for issuing the authorization to control said image sensing apparatus after restoring the conditions.

44 (ORIGINAL): The computer program product according to claim 40, comprising computer readable program code means for determining whether or not said restored image reception apparatus has higher priority than the other image reception apparatus, wherein the authorization issued to the other image reception apparatus is suspended when said restored image reception apparatus has higher priority than the other image reception apparatus.

45 (ORIGINAL): The computer program product according to claim 36 comprising computer readable program code means for setting a period allowed for said image reception apparatus to hold the authorization at the time of restoration of communication after the undesired termination.

46 (ORIGINAL): The computer program product according to claim 39 comprising:
computer readable program code means for informing said restored image reception apparatus of time to take until said image transmission apparatus issues the authorization to control said image sensing apparatus to said restored image reception apparatus;
and

computer readable program code means for indicating the notified time in said restored image reception apparatus.

47 (CURRENTLY AMENDED): An image transmission apparatus, used in connection with an image sensing apparatus controllable by an external device, having a function of digitizing and transmitting an image signal acquired by said image sensing apparatus via a network and a function of issuing authorization to control said image sensing apparatus,

wherein, in a case where the image transmission apparatus issues the authorization to control said image sensing apparatus to an external apparatus and communication between the external apparatus and the image transmission apparatus is undesirably terminated while the external apparatus holds the authorization, after restoring the communication within a predetermined period, the image transmission apparatus restores conditions of said image sensing apparatus to the conditions at the time of the undesired termination, and allows said external apparatus to continuously control said image sensing apparatus under the ~~same~~ restored conditions ~~as at the time of the undesired termination if the external apparatus restores the communication within a predetermined period.~~

A3
cont

48 (ORIGINAL): The image transmission apparatus according to claim 47 comprising certification means for identifying whether or not said external apparatus is allowed to control said image sensing apparatus.

49 (ORIGINAL): The image transmission apparatus according to claim 47, wherein the image transmission apparatus immediately issues the authorization to control said image sensing

apparatus to said external apparatus when said external apparatus restores the communication within the predetermined period after the undesired termination of the communication.

50 (ORIGINAL): The image transmission apparatus according to claim 47, wherein, in a case where said external apparatus restores the communication within the predetermined period after the undesired termination and another external apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, the image transmission apparatus gives priority to said restored external apparatus to receive the authorization to control said image sensing apparatus after the other external apparatus releases the authorization to control said image sensing apparatus.

A3
cont

51 (ORIGINAL): The image transmission apparatus according to claim 47, wherein, in a case where said external apparatus restores the communication within the predetermined period after the undesired termination and another external apparatus holds authorization to control said image sensing apparatus at the time of the restoration of the communication, the image transmission apparatus suspends the authorization issued to the other external apparatus and issues authorization to control said image sensing apparatus to said restored external apparatus.

52 (ORIGINAL): The image transmission apparatus according to claim 47 comprising administration means for, when a request for authorization to control said image sensing apparatus is received after the undesired termination, determining whether or not an external

apparatus which requested the authorization is said external apparatus whose communication was undesirably terminated while holding an authorization.

53 (ORIGINAL): The image transmission apparatus according to claim 52, wherein said administration means performs the determination on the basis of an IP (internet protocol) address and a user name of the external apparatus which requested the authorization.

54 (ORIGINAL): The image transmission apparatus according to claim 52, wherein said administration means performs the determination on the basis of a key issued by the image transmission apparatus and a password.

A3
cont

55 (CURRENTLY AMENDED): The image transmission apparatus according to claim 50 47, wherein, ~~in a case where said external apparatus restores the communication within the predetermined period after the undesired termination,~~ the image transmission apparatus issues the authorization to control said image sensing apparatus after restoring the conditions of said image sensing apparatus ~~to the conditions at the time of the undesired termination.~~

56 (ORIGINAL): The image transmission apparatus according to claim 51, wherein, in a case where said external apparatus restores the communication within the predetermined period after the undesired termination, the image transmission apparatus issues the authorization to

control said image sensing apparatus after restoring conditions of said image sensing apparatus to the conditions at the time of the undesired termination.

57 (ORIGINAL): The image transmission apparatus according to claim 51, wherein the image transmission apparatus issues the authorization to control said image sensing apparatus to said restored image sensing apparatus after suspending the authorization issued to the other image sensing apparatus if said restored external apparatus has higher priority than the other external apparatus.

A3 cont
58 (ORIGINAL): The image transmission apparatus according to claim 57, wherein said priority is determined on the basis of time when the external apparatuses start controlling said image sensing apparatus.

59 (ORIGINAL): The image transmission apparatus according to claim 57, wherein, when the image transmission apparatus charges an external apparatus for the authorization to control said image sensing apparatus, said priority is determined on the basis of ranks given to the external apparatuses in a charging system.

60 (ORIGINAL): The image transmission apparatus according to claim 47 comprising authorization period administration means for setting a period allowed for said external apparatus

to hold the authorization at the time of restoration of communication after the undesired termination.

61 (ORIGINAL): The image transmission apparatus according to claim 60, wherein said authorization period administration means sets a period T-t for said external apparatus at the time of restoration of communication, where T indicates a period which is allowed for an external apparatus to hold authorization and t indicates a period elapsed by the time of the termination.

A3
Cond
62 (ORIGINAL): The image transmission apparatus according to claim 60, wherein said authorization period administration means sets a period T-t-s for said external apparatus at the time of restoration of communication, where T indicates a period which is allowed for an external apparatus to hold authorization, t indicates a period elapsed by the time of the termination, and s indicates a period elapsed since the termination of the communication until the restoration of the communication.

63 (ORIGINAL): The image transmission apparatus according to claim 50, wherein the image transmission apparatus informs said restored external apparatus of time to take until the image transmission apparatus issues the authorization to control said image sensing apparatus to said restored external apparatus.

PATENT

Application Serial No. 09/368,469
Amendment dated January 6, 2004
Reply to Office Action of October 6, 2003
Docket No. 1232-4554

A3
encl

64 (ORIGINAL): The image transmission apparatus according to claim 47, wherein the
image transmission apparatus includes said image sensing apparatus.
